## CLAIMS

1. A method for treating Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from a brain of the subject to a systemic blood circulation of the subject, so as to treat the AD.

2. A method for treating Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from a brain of the subject to a systemic blood circulation of the subject, so as to treat the AD.

3. A method for treating Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from cerebrospinal fluid (CSF) of the subject to a systemic blood circulation of the subject, so as to treat the AD.

4. A method for treating Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from cerebrospinal fluid (CSF) of the subject to a systemic blood circulation of the subject, so as to treat the AD.

5. The method according to any one of claims 1 or 3, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

6. The method according to any one of claims 1-4, wherein the AD-related constituent includes an inflammatory-related constituent, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the inflammatory-related constituent.

7. The method according to any one of claims 1-4, wherein the AD-related constituent includes tau protein, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the tau protein.

8. The method according to any one of claims 1-4, wherein the AD-related constituent includes PS1, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the PS1.

9. The method according to any one of claims 1-4, wherein the AD-related constituent includes PS2, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the PS2.

10. The method according to any one of claims 1-4, wherein the AD-related constituent includes a DNA fragment, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the DNA fragment.

11. The method according to any one of claims 1-4, wherein the AD-related constituent includes an RNA fragment, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the RNA fragment.

12. The method according to any one of claims 1-4, wherein the AD-related constituent includes a cytokine, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the cytokine.

13. The method according to any one of claims 1-4, wherein the AD-related

constituent includes a marker of neuronal death or degeneration, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the marker.

14. The method according to any one of claims 1-4, wherein the AD-related constituent includes a marker of an inflammatory process, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the marker.

15. The method according to any one of claims 1-4, wherein the AD-related constituent includes a neurotoxic substance, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the neurotoxic substance.

16. The method according to any one of claims 1-4, wherein the AD-related constituent includes amyloid protein, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the amyloid protein.

17. The method according to claim 16, wherein the amyloid protein is selected from the list consisting of: wild amyloid protein and mutated amyloid protein, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the selected amyloid protein.

18. The method according to claim 16, wherein the amyloid protein is selected from the list consisting of: fragmented amyloid protein and whole amyloid protein, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the selected amyloid protein.

19. A method for treating Alzheimer's disease (AD), comprising:

supplying a pharmaceutical agent to a systemic blood circulation of a subject;

stimulating sphenopalatine ganglion (SPG)-related tissue of the subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in passage of the pharmaceutical agent from the systemic blood circulation into a central nervous system (CNS) of the subject, so as to treat the AD.

20. The method according to claim 19, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

21. A method for treating Alzheimer's disease (AD), comprising:

supplying a pharmaceutical agent to a systemic blood circulation of a subject;

stimulating sphenopalatine ganglion (SPG)-related tissue of the subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in passage of the pharmaceutical agent from the systemic blood circulation into a central nervous system (CNS) of the subject, so as to treat the AD.

22. The method according to any one of claims 19 or 21, wherein supplying the pharmaceutical agent comprises administering the pharmaceutical agent to the systemic blood circulation using a technique selected from the list consisting of: per-oral administration, intravenous administration, intra-arterial administration, intraperitoneal administration, subcutaneous administration, and intramuscular administration.

23. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a glutamate receptor antagonist, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the glutamate receptor antagonist.

24. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes an NMDA receptor blocker, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the NMDA receptor blocker.

25. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes an agent having an inhibitory effect on derivation of β-amyloid from amyloid precursor protein, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the agent.

26. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a cholinesterase inhibitor, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the cholinesterase inhibitor.

27. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a stimulant of nerve regeneration, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the stimulant.

28. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a nerve growth factor, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the nerve growth factor.

29. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a compound that stimulates production of nerve growth factor, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the compound.

30. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a microglial activation modulator, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the microglial activation modulator.

31. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes an antioxidant, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the antioxidant.

32. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a hormone, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the hormone.

33. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes an inhibitor of protein tyrosine phosphatases, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the inhibitor.

34. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a medium chain triglyceride, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the medium chain triglyceride.

35. The method according to any one of claims 19 or 21, wherein the pharmaceutical

agent includes a gene therapy agent, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the gene therapy agent.

36. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes a β-amyloid inhibitor, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the β-amyloid inhibitor.

37. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes an endogenous protein, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the endogenous protein.

38. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent includes an anti-inflammatory agent, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the anti-inflammatory agent.

39. The method according to claim 38, wherein the anti-inflammatory agent includes a non-steroidal anti-inflammatory drug (NSAID), and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the NSAID.

40. The method according to any one of claims 19 or 21, wherein the pharmaceutical agent is selected from the list consisting of: an AD vaccine, a component of an AD vaccine, and a derivative of an AD vaccine, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent.

41. The method according to claim 40, wherein the selected pharmaceutical agent includes an anti-inflammatory drug, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent including the anti-inflammatory drug.

42. The method according to claim 40, wherein the selected pharmaceutical agent includes antibodies against a specific protein that is characteristic of AD, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent including the antibodies.

43. The method according to claim 42, wherein the selected pharmaceutical agent includes antibodies against β-amyloid, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent including the antibodies against the β-amyloid.

44. The method according to claim 42, wherein the selected pharmaceutical agent includes antibodies against tau protein, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent including the antibodies against the tau protein.

45. The method according to claim 21, wherein supplying the pharmaceutical agent comprises administering the pharmaceutical agent for inhalation by the subject.

46. The method according to claim 45, wherein administering the pharmaceutical agent for inhalation by the subject comprises administering the pharmaceutical agent mixed with the odorant.

47. A method for treating Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of the subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

48. The method according to claim 47, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

49. A method for treating Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of the subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

50. The method according to any one of claims 47 or 49, wherein configuring the stimulation comprises configuring the stimulation so as to cause an improvement in a

metabolic state of a central nervous system (CNS) of the subject.

51. A method for diagnosing Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

52. The method according to claim 51, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

53. A method for diagnosing Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

54. The method according to any one of claims 51 or 53, and comprising measuring a constituent of the other body compartment.

55. The method according to any one of claims 51 or 53, wherein the other body compartment includes a systemic blood circulation of the subject, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in molecular passage between the CNS and the systemic blood circulation.

56. The method according to any one of claims 51 or 53, wherein the other body compartment includes plasma of the subject, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in molecular passage between the CNS and the plasma.

57. The method according to any one of claims 51 or 53, wherein the other body compartment includes serum of the subject, and wherein configuring the stimulation

comprises configuring the stimulation so as to cause the increase in molecular passage between the CNS and the serum.

58. The method according to any one of claims 51 or 53, wherein the other body compartment is ascites of the subject, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in molecular passage between the CNS and the ascites.

59. A method for diagnosing Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject, so as to facilitate a diagnosis of the AD.

60. The method according to claim 59, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

61. A method for diagnosing Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject, so as to facilitate a diagnosis of the AD.

62. The method according to any one of claims 59 or 61, and comprising measuring a constituent of the other body fluid.

63. The method according to claim 62, and comprising correlating an abnormal concentration of the constituent to a pathology of AD.

64. The method according to claim 62, wherein the constituent is selected from the group consisting of: a protein, a hormone, an antibody, an electrolyte, a neuropeptide, and an enzyme, and wherein measuring the constituent comprises measuring the selected

constituent.

65. The method according to claim 62, wherein the other body fluid is selected from the list consisting of: whole blood, plasma, serum, and ascites, and wherein measuring the constituent comprises sampling the selected fluid.

66. The method according to claim 62, wherein measuring the constituent comprises extracting the other body fluid from tissue of the subject.

67. The method according to claim 62, wherein measuring the constituent comprises measuring a plurality of constituents.

68. The method according to claim 67, and comprising determining a diagnostic result according to the interrelation between concentrations of the constituents.

69. A method for diagnosing Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject, so as to facilitate a diagnosis of the AD.

70. The method according to claim 69, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

71. A method for diagnosing Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject, so as to facilitate a diagnosis of the AD.

72. The method according to any one of claims 69 or 71, and comprising measuring a constituent of the tissue.

73. The method according to claim 72, and comprising correlating an abnormal concentration of the constituent to a pathology of AD.

74. The method according to claim 72, wherein the constituent is selected from the group consisting of: a protein, a hormone, an antibody, an electrolyte, a neuropeptide, and an enzyme, and wherein measuring the constituent comprises measuring the selected constituent.

75. The method according to claim 72, wherein measuring the constituent comprises measuring a plurality of constituents of the tissue.

76. The method according to claim 75, and comprising determining a diagnostic result according to the interrelation between concentrations of the constituents of the tissue.

77. A method for treating Alzheimer's disease (AD), comprising:

applying an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject; and

configuring the signal so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from a brain of the subject to a systemic blood circulation of the subject, so as to treat the AD.

78. A method for treating Alzheimer's disease (AD), comprising presenting an odorant to an air passage of a subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject from cerebrospinal fluid (CSF) of the subject to a systemic blood circulation of the subject, so as to treat the AD.

79. A method for treating Alzheimer's disease (AD), comprising:

supplying a pharmaceutical agent to a systemic blood circulation of a subject;

applying an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject; and

configuring the signal so as to cause an increase in passage of the pharmaceutical agent from the systemic blood circulation into a central nervous system (CNS) of the subject, so as to treat the AD.

80. A method for treating Alzheimer's disease (AD), comprising:

supplying a pharmaceutical agent to a systemic blood circulation of a subject; and

presenting an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in passage of the pharmaceutical agent from the systemic blood circulation into a central nervous system (CNS) of the subject, so as to treat the AD.

81. A method for treating Alzheimer's disease (AD), comprising:

applying an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a

communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject; and

configuring the signal so as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

82. A method for treating Alzheimer's disease (AD), comprising presenting an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

83. A method for diagnosing Alzheimer's disease (AD), comprising:

applying an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject; and

configuring the signal so as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

84. A method for diagnosing Alzheimer's disease (AD), comprising presenting an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in molecular passage between

a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

85. A method for diagnosing Alzheimer's disease (AD), comprising:

applying an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject; and

configuring the signal so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject, so as to facilitate a diagnosis of the AD.

86. A method for diagnosing Alzheimer's disease (AD), comprising presenting an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject, so as to facilitate a diagnosis of the AD.

87. A method for diagnosing Alzheimer's disease (AD), comprising:

applying an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a

communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject; and

configuring the signal so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject, so as to facilitate a diagnosis of the AD.

88. A method for diagnosing Alzheimer's disease (AD), comprising presenting an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject, so as to facilitate a diagnosis of the AD.

89. The method according to any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86 or 88, and comprising presenting in association with the odorant an analgesic in a dosage configured to reduce a sensation associated with the presenting of the odorant.

90. The method according to any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88, wherein the air passage includes a nasal cavity of the patient, and wherein presenting the odorant comprises presenting the odorant to the nasal cavity.

91. The method according to any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88, wherein the air passage includes a throat of the patient, and wherein presenting the odorant comprises presenting the odorant to the throat.

92. The method according to any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88, wherein the odorant is selected from the list consisting of: propionic acid, cyclohexanone, and amyl acetate, and wherein presenting the odorant comprises presenting the selected odorant.

93. The method according to any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88, wherein the odorant is selected from the list consisting of: acetic acid, citric acid, carbon dioxide, sodium chloride, and ammonia, and wherein presenting the odorant comprises presenting the selected odorant.

94. The method according to any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88, wherein the odorant is selected from the list consisting of: menthol, alcohol, nicotine, piperine, gingerol, zingerone, allyl isothiocyanate, cinnamaldehyde, cuminaldehyde, 2-propenyl/2-phenylethyl isothiocyanate, thymol, and eucalyptol, and wherein presenting the odorant comprises presenting the selected odorant.

95. The method according to any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88, wherein presenting the odorant comprises presenting a capsule for placement within a mouth of the patient, the capsule being configured to dissolve upon contact with salivary liquids of the patient, whereupon the odorant is presented to the air passage.

96. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from a brain of the subject to a systemic blood circulation of the subject, so as to treat the AD.

97. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from a brain of the subject to a systemic blood circulation of the subject, so as to treat the AD.

98. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to

the SPG, and

configure the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from cerebrospinal fluid (CSF) of the subject to a systemic blood circulation of the subject, so as to treat the AD.

99. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from cerebrospinal fluid (CSF) of the subject to a systemic blood circulation of the subject, so as to treat the AD.

100. The apparatus according to any one of claims 96 or 98, wherein the stimulator is adapted to directly stimulate the SPG.

101. The apparatus according to any one of claims 96-99, wherein the AD-related constituent is selected from the list consisting of: an inflammatory-related constituent, tau protein, PS1, PS2, a cytokine, and a marker of an inflammatory process, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the clearance of the selected constituent.

102. The apparatus according to any one of claims 96-99, wherein the AD-related constituent is selected from the list consisting of: a DNA fragment and an RNA fragment, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the clearance of the fragment.

103. The apparatus according to any one of claims 96-99, wherein the AD-related constituent is selected from the list consisting of: a marker of neuronal death or degeneration, and a neurotoxic substance, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the clearance of the selected constituent.

104. The apparatus according to any one of claims 96-99, wherein the AD-related constituent is selected from the list consisting of: amyloid protein, wild amyloid protein, mutated amyloid protein, fragmented amyloid protein, and whole amyloid protein, and

wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the clearance of the amyloid protein.

105. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of the subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in passage from a systemic blood circulation of the subject into a central nervous system (CNS) of the subject, of a pharmaceutical agent supplied to the systemic blood circulation, so as to treat the AD.

106. The apparatus according to claim 105, wherein the stimulator is adapted to directly stimulate the SPG.

107. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of the subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in passage from a systemic blood circulation of the subject into a central nervous system (CNS) of the subject, of a pharmaceutical agent supplied to the systemic blood circulation, so as to treat the AD.

108. The apparatus according to any one of claims 105 or 107, wherein the pharmaceutical agent is selected from the list consisting of: a glutamate receptor antagonist, an NMDA receptor blocker, a cholinesterase inhibitor, an agent having an inhibitory effect on derivation of β-amyloid from amyloid precursor protein, a β-amyloid inhibitor, and an inhibitor of protein tyrosine phosphatases, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent.

109. The apparatus according to any one of claims 105 or 107, wherein the pharmaceutical agent is selected from the list consisting of: a stimulant of nerve regeneration, a nerve growth factor, and a compound that stimulates production of nerve

growth factor, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent.

110. The apparatus according to any one of claims 105 or 107, wherein the pharmaceutical agent is selected from the list consisting of: a microglial activation modulator, an antioxidant, and a hormone, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent.

111. The apparatus according to any one of claims 105 or 107, wherein the pharmaceutical agent is selected from the list consisting of: a medium chain triglyceride and an endogenous protein, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent.

112. The apparatus according to any one of claims 105 or 107, wherein the pharmaceutical agent includes a gene therapy agent, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the passage of the gene therapy agent.

113. The apparatus according to any one of claims 105 or 107, wherein the pharmaceutical agent is selected from the list consisting of: an anti-inflammatory agent and a non-steroidal anti-inflammatory drug (NSAID), and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the passage of the anti-inflammatory agent.

114. The apparatus according to any one of claims 105 or 107, wherein the pharmaceutical agent is selected from the list consisting of: an AD vaccine, an AD vaccine which includes antibodies against a specific protein that is characteristic of AD, an AD vaccine which includes antibodies against β-amyloid, an AD vaccine which includes antibodies against tau protein, a combination of an AD vaccine and an anti-inflammatory drug, a component of an AD vaccine, and a derivative of an AD vaccine, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent.

115. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of the subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an

SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

116. The apparatus according to claim 115, wherein the stimulator is adapted to directly stimulate the SPG.

117. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of the subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

118. The apparatus according to any one of claims 115 or 117, wherein the stimulator is adapted to configure the stimulation so as to cause an improvement in a metabolic state of a central nervous system (CNS) of the subject.

119. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

120. The apparatus according to claim 119, wherein the stimulator is adapted to directly stimulate the SPG.

121. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by presenting

an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

122. The apparatus according to any one of claims 119 or 121, wherein the apparatus is adapted to measure a constituent of the other body compartment.

123. The apparatus according to any one of claims 119 or 121, wherein the other body compartment includes a systemic blood circulation of the subject, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in molecular passage between the CNS and the systemic blood circulation.

124. The apparatus according to any one of claims 119 or 121, wherein the other body compartment includes plasma of the subject, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in molecular passage between the CNS and the plasma.

125. The apparatus according to any one of claims 119 or 121, wherein the other body compartment includes serum of the subject, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in molecular passage between the CNS and the serum.

126. The apparatus according to any one of claims 119 or 121, wherein the other body compartment is ascites of the subject, and wherein the stimulator is adapted to configure the stimulation so as to cause the increase in molecular passage between the CNS and the ascites.

127. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject, so as to

facilitate a diagnosis of the AD.

128. The apparatus according to claim 127, wherein the stimulator is adapted to directly stimulate the SPG.

129. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject, so as to facilitate a diagnosis of the AD.

130. The apparatus according to any one of claims 127 or 129, wherein the apparatus is adapted to measure a constituent of the other body fluid.

131. The apparatus according to claim 130, wherein the apparatus is adapted to correlate an abnormal concentration of the constituent to a pathology of AD.

132. The apparatus according to claim 130, wherein the constituent is selected from the group consisting of: a protein, a hormone, an antibody, an electrolyte, a neuropeptide, and an enzyme, and wherein the apparatus is adapted to measure the selected constituent.

133. The apparatus according to claim 130, wherein the other body fluid is selected from the list consisting of: whole blood, plasma, serum, and ascites, and wherein the apparatus is adapted to measure the constituent by sampling the selected fluid.

134. The apparatus according to claim 130, wherein the apparatus is adapted to measure the constituent by extracting the other body fluid from tissue of the subject.

135. The apparatus according to claim 130, wherein the apparatus is adapted to measure a plurality of constituents.

136. The apparatus according to claim 135, and the apparatus is adapted to determine a diagnostic result according to the interrelation between concentrations of the constituents.

137. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject, so as to facilitate a diagnosis of the AD.

138. The apparatus according to claim 137, wherein the apparatus is adapted to directly stimulate the SPG.

139. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

stimulate sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG, and

configure the stimulation so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject, so as to facilitate a diagnosis of the AD.

140. The apparatus according to any one of claims 137 or 139, wherein the apparatus is adapted to measure a constituent of the tissue.

141. The apparatus according to claim 140, wherein the apparatus is adapted to correlate an abnormal concentration of the constituent to a pathology of AD.

142. The apparatus according to claim 140, wherein the constituent is selected from the group consisting of: a protein, a hormone, an antibody, an electrolyte, a neuropeptide, and an enzyme, and wherein the apparatus is adapted to measure the selected constituent.

143. The apparatus according to claim 140, wherein the apparatus is adapted to measure a plurality of constituents of the tissue.

144. The apparatus according to claim 143, wherein the apparatus is adapted to determine a diagnostic result according to the interrelation between concentrations of the constituents of the tissue.

145. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted

to:

apply an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject, and

configure the signal so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from a brain of the subject to a systemic blood circulation of the subject, so as to treat the AD.

146. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to present an odorant to an air passage of a subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject from cerebrospinal fluid (CSF) of the subject to a systemic blood circulation of the subject, so as to treat the AD.

147. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to apply an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the

subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject, and

configure the signal so as to cause an increase in passage from a systemic blood circulation of the subject into a central nervous system (CNS) of the subject, of a pharmaceutical agent supplied to the systemic blood circulation, so as to treat the AD.

148. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to present an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in passage from a systemic blood circulation of the subject into a central nervous system (CNS) of the subject, of a pharmaceutical agent supplied to the systemic blood circulation, so as to treat the AD.

149. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to:

apply an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject, and

configure the signal so as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

150. Apparatus for treating Alzheimer's disease (AD), comprising a stimulator adapted to present an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

151. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

apply an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject, and

configure the signal so as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

152. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to present an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

153. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

apply an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior

nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject, and

configure the signal so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject, so as to facilitate a diagnosis of the AD.

154. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to present an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject, so as to facilitate a diagnosis of the AD.

155. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to:

apply an electrical signal to at least one site of a subject, the site selected from the list consisting of: a sphenopalatine ganglion (SPG) of the subject, an anterior ethmoidal nerve of the subject, a posterior ethmoidal nerve of the subject, a communicating branch between an anterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a communicating branch between a posterior ethmoidal nerve and a retro-orbital branch of an SPG of the subject, a greater palatine nerve of the subject, a lesser palatine nerve of the subject, a sphenopalatine nerve of the subject, a communicating branch between a maxillary nerve and an SPG of the subject, a nasopalatine nerve of the subject, a posterior nasal nerve of the subject, an infraorbital nerve of the subject, an otic ganglion of the subject, an afferent fiber going into the otic ganglion of the subject, an efferent fiber going out of the otic ganglion of the subject, a vidian nerve of the subject, a greater superficial petrosal nerve of the subject, and a lesser deep petrosal nerve of the subject, and

configure the signal so as to cause an increase in molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject, so as to facilitate a diagnosis of the AD.

156. Apparatus for diagnosing Alzheimer's disease (AD), comprising a stimulator adapted to present an odorant to an air passage of the subject, the odorant having been selected for presentation to the air passage because it is such as to cause an increase in

molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject, so as to facilitate a diagnosis of the AD.

157. The apparatus according to any one of claims 97, 99, 107, 117, 121, 129, 139, 146, 148, 150, 152, 154 or 156, wherein the stimulator is adapted to present in association with the odorant an analgesic in a dosage configured to reduce a sensation associated with the presenting of the odorant.

158. The apparatus according to any one of claims 97, 99, 107, 117, 121, 129, 139, 146, 148, 150, 152, 154, or 156, wherein the air passage includes a nasal cavity of the patient, and wherein the stimulator is adapted to present the odorant to the nasal cavity.

159. The apparatus according to any one of claims 97, 99, 107, 117, 121, 129, 139, 146, 148, 150, 152, 154, or 156, wherein the air passage includes a throat of the patient, and wherein the stimulator is adapted to present the odorant to the throat.

160. The apparatus according to any one of claims 97, 99, 107, 117, 121, 129, 139, 146, 148, 150, 152, 154, or 156, wherein the odorant is selected from the list consisting of: propionic acid, cyclohexanone, and amyl acetate, and wherein the stimulator is adapted to present the selected odorant.

161. The apparatus according to any one of claims 97, 99, 107, 117, 121, 129, 139, 146, 148, 150, 152, 154, or 156, wherein the odorant is selected from the list consisting of: acetic acid, citric acid, carbon dioxide, sodium chloride, and ammonia, and wherein the stimulator is adapted to present the selected odorant.

162. The apparatus according to any one of claims 97, 99, 107, 117, 121, 129, 139, 146, 148, 150, 152, 154, or 156, wherein the odorant is selected from the list consisting of: menthol, alcohol, nicotine, piperine, gingerol, zingerone, allyl isothiocyanate, cinnamaldehyde, cuminaldehyde, 2-propenyl/2-phenylethyl isothiocyanate, thymol, and eucalyptol, and wherein the stimulator is adapted to present the selected odorant.

163. The apparatus according to any one of claims 97, 99, 107, 117, 121, 129, 139, 146, 148, 150, 152, 154, or 156, wherein the apparatus comprises a capsule for placement within a mouth of the patient, the capsule adapted to hold the odorant, and configured to dissolve upon contact with salivary liquids of the patient, whereupon the odorant is presented to the air passage.

164. Apparatus for treating Alzheimer's disease (AD), comprising:

an odorant-storage vessel;

an odorant for storage within the odorant-storage vessel, the odorant being capable of increasing clearance of an AD-related constituent of a central nervous system (CNS) of the subject from cerebrospinal fluid (CSF) of the subject to a systemic blood circulation of the subject; and

an odorant-delivery element, adapted to present the odorant to an air passage of the patient, so as to treat the AD.

165. Apparatus for treating Alzheimer's disease (AD), comprising:

an odorant-storage vessel;

an odorant for storage within the odorant-storage vessel, the odorant being capable of increasing passage, from a systemic blood circulation of a subject into a central nervous system (CNS) of the subject, of a pharmaceutical agent supplied to the systemic blood circulation; and

an odorant-delivery element, adapted to present the odorant to an air passage of the patient, so as to treat the AD.

166. Apparatus for treating Alzheimer's disease (AD), comprising:

an odorant-storage vessel;

an odorant for storage within the odorant-storage vessel, the odorant being capable of increasing cerebral blood flow (CBF) of the subject; and

an odorant-delivery element, adapted to present the odorant to an air passage of the patient, so as to treat the AD.

167. Apparatus for diagnosing Alzheimer's disease (AD), comprising:

an odorant-storage vessel;

an odorant for storage within the odorant-storage vessel, the odorant being capable of increasing molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject; and

an odorant-delivery element, adapted to present the odorant to an air passage of the patient, so as to facilitate a diagnosis of the AD.

168. Apparatus for diagnosing Alzheimer's disease (AD), comprising:

an odorant-storage vessel;

an odorant for storage within the odorant-storage vessel, the odorant being capable

of increasing molecular passage between cerebrospinal fluid (CSF) of the subject and another body fluid of the subject; and

an odorant-delivery element, adapted to present the odorant to an air passage of the patient, so as to facilitate a diagnosis of the AD.

169. Apparatus for diagnosing Alzheimer's disease (AD), comprising:

an odorant-storage vessel;

an odorant for storage within the odorant-storage vessel, the odorant being capable of increasing molecular passage between cerebrospinal fluid (CSF) of the subject and a tissue of the subject; and

an odorant-delivery element, adapted to present the odorant to an air passage of the patient, so as to facilitate a diagnosis of the AD.

170. The apparatus according to any one of claims 164, 165, 166, 167, 168, or 169, wherein the odorant-storage vessel in combination with the odorant-delivery element comprises an aqueous spray nasal inhaler.

171. The apparatus according to any one of claims 164, 165, 166, 167, 168, or 169, wherein the odorant-storage vessel in combination with the odorant-delivery element comprises a metered dose nasal inhaler.

172. The apparatus according to any one of claims 164, 165, 166, 167, 168, or 169, wherein the odorant-storage vessel in combination with the odorant-delivery element comprises an air-dilution olfactometer.

173. The apparatus according to any one of claims 164, 165, 166, 167, 168, or 169, wherein the air passage includes a nasal cavity of the patient, and wherein the odorant-delivery element is adapted to present the odorant to the nasal cavity.

174. The apparatus according to any one of claims 164, 165, 166, 167, 168, or 169, wherein the air passage includes a throat of the patient, and wherein the odorant-delivery element is adapted to present the odorant to the throat.

175. Apparatus according to any one of claims 164, 165, 166, 167, 168, or 169, wherein the odorant comprises an agent selected from the list consisting of: propionic acid, cyclohexanone, and amyl acetate.

176. Apparatus according to any one of claims 164, 165, 166, 167, 168, or 169, wherein the odorant comprises an agent selected from the list consisting of: acetic acid, citric acid,

carbon dioxide, sodium chloride, and ammonia.

177. Apparatus according to any one of claims 164, 165, 166, 167, 168, or 169, wherein the odorant comprises an agent selected from the list consisting of: menthol, alcohol, nicotine, piperine, gingerol, zingerone, allyl isothiocyanate, cinnamaldehyde, cuminaldehyde, 2-propenyl/2-phenylethyl isothiocyanate, thymol, and eucalyptol.